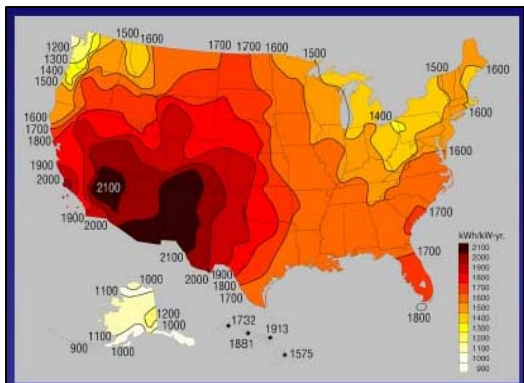




Solar Energy Technologies: Applications, Economics, and System Designs

**Presented by Bill Guiney, Renewable Energy Solutions
Program Manager, Johnson Controls, Inc.**



Date: April 15, 2009

Time: 12:30 pm – 4:00 pm

**Location: Frankfort, Kentucky
{specific location to be announced}**

Fee: \$25



“The current technical potential of solar water heating in the United States is estimated at about 1 quad of primary energy savings per year, equivalent to an annual CO₂ emissions reduction potential of about 50-75 million metric tons.

“For consumers, this savings translates into more than \$8 billion per year in retail energy costs, while protecting against fuel price escalation...”

- The Technical Potential of Solar Water Heating to Reduce Fossil Fuel Use and Greenhouse Gas Emissions in the United States, Paul Denholm, National Renewable Energy Laboratory, March 2007

Who Should Attend?

- * Architects, engineers, building designers
- * Facility Managers & Government facilities personnel
- * Utility Company DSM & Renewable Energy developers
- * School officials and building managers
- * Construction, plumbing, HVAC, & electrical contractors
- * State utility regulators

Why attend?

- * Learn the basics of solar electric and solar thermal system applications, economics, and design
- * Learn how solar thermal systems are applied to HVAC and plumbing systems in residential, commercial and institutional buildings.
- * Understand the applications and emerging technologies that will revolutionize the way we apply solar thermal systems.
- * See how the Solar Industry has changed and developed since the early pioneering days of the 1980's.
- * Understand architectural considerations for performance & aesthetics.

**Sponsored by:
Johnson Controls, Inc.**

**Kentucky Department of
Energy Development and
Independence**

To Register, visit

www.kysolar.org

Organized by the Kentucky Solar Partnership and Appalachia – Science in the Public Interest. For more information, call 502-227-4562 or email: solar@kysolar.org.

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What you will learn at the Seminar:

- * Reliable and code compliant system designs.
- * New solar thermal technologies and products.
- * Certification and performance testing of products.
- * Solar water heating applications for commercial buildings.
- * Building integration and collector mounting options.
- * Control strategies for solar water heating.
- * Hot water load analysis and system sizing.
- * Economics and performance modeling

Seminar Agenda

12:30 – 1:00 Registration

1:00 – 2:00 Solar Applications

2:00 – 2:30 Solar PV and Thermal Systems & Certifications

2:30 – 2:45 Break

2:45 – 3:30 Solar Economics

3:30 – 4:00 Q&A

About the Presenter

Bill Guiney is Renewable Energy Solutions Program Manager for Johnson Controls, and based in Milwaukee, Wisc. He has 27 years of experience in the solar industry as a contractor, educator, distributor and manufacturer. He has provided renewable energy and energy efficiency training programs around the world and currently is an instructor for solar thermal energy systems at the North Carolina and Florida Solar Energy Centers. Bill is on the solar thermal technical committee of the North American Board of Certified Energy Practitioners (NABCEP) and provides the Solar Thermal Exam Preparatory Training for the Interstate Renewable Energy Council (IREC).

The Kentucky Solar Partnership is a project of the non-profit organization Appalachia – Science in the Public Interest. Since 1977 ASPI has worked for the advancement of solar energy, energy conservation, and other sustainable energy practices in Kentucky.

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